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09/833,915	04/12/2001	Wayne L. Hutchinson	8599	3838

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EXAMINER
EHICHIOYA, FRED I

ART UNIT	PAPER NUMBER
2172	4

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/833,915	HUTCHINSON, WAYNE L.	
	Examiner	Art Unit	
	Fred I. Ehichioya	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1 - 20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1- 20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. The application has been examined. Claims 1 – 20 are pending in this office action.

2. Claims 1 – 20 are rejected in this office action.

Specification

3. The abstract of the disclosure is objected to because the abstract in an application filed under 35 U.S.C. 111 may not exceed 150 words in length. See MPEP § 608.01(b). The abstract of the specification exceeds 150 words. Correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,560,005 issued to Michael K. Hoover et al (hereafter "Hoover").

Regarding claim 1, Hoover teaches a method of dynamically configuring a cardinality of keyword attributes having executable instructions, comprising the steps of:

receiving a table having a table definition comprising an identification field, a keyword field, and a keyword value field (see FIG. 7 and FIG. 8, column 24, lies 9 - 16; Referring to FIG. 8 module 130d, "person" is an "identification field", "provider" is a "keyword field" and "row" is a "keyword value field")

inserting a first value into the table wherein the first value is part of the keyword value field and associated with a first keyword which is part of the keyword field (see FIG.8 module 130d and FIG. 10, column 29, lines 65 – 67 and column 30, lines 1 - 3; Referring to FIG. 8 module 130d, on the first row, "91011" is a "first value" of the keyword value field and "provider" is the "first keyword").

inserting a second value into the table wherein the second value is part of the keyword value field and associated with the first keyword (see FIG. 8 module 130d, Referring to FIG. 8 module 130d, on the second row, "91015" is a "second value" of the keyword value field, and the association is by "0012" the person object identification); and

associating a first identification which is part of the identification field with the first keyword, the first value, and the second value (see FIG.8 module 130d, first identification is "person", "0012" is part of identification field with first keyword "provider". First value is "91011" and second value is "91015". Association is by identification value "0012".

However, Hoover does not explicitly disclose the claimed receiving a table having a table definition comprising an identification field, a keyword field, and a keyword value field, inserting a first value into the table wherein the first value is part of

the keyword value field and associated with a first keyword which is part of the keyword field; inserting a second value into the table and associating a first identification which is part of the identification field with the first keyword, the first value, and the second value: Hoover discloses a table definition as shown in fig. 7; Hoover discloses first value is part of the keyword value field and associated with a first keyword which is part of the keyword field, the second value is part of the keyword value field and associated with the first keyword and associating a first identification which is part of the identification field with the first keyword, the first value, and the second value as shown in FIG. 8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Hoover wherein one table relates object identifiers to other object attribute tables. The motivation being that since attributes of an object can exist in one or more remote locations, mapping table by object identifier permits assembly or joining of data to construct a current complete set of object attributes associated with any given object. This permits search terms to object identifiers and also to rapid searching to find an object identifier associated with the predetermined search terms while at the same time retrieving desired information.

Regarding claim 2, Hoover teaches ensuring the table definition remains unchanged after the insertions into the table (see column 29, lines 42 – 50).

Regarding claim 3, Hoover teaches establishing a first row of the table to house the first identification, the first keyword, and the first value (see FIG.8 module 130d; first

row, first identification is "0012", first keyword is "provider" and first value is "91011") and

establishing a second row of the table to house the first identification, the first keyword, and the second value (see FIG.8 module 130d; second row, first identification is "0012", first keyword is "provider" and second value is "91015").

Regarding claim 4, Hoover teaches creating a composite table key from the, identification field, the keyword field, and the keyword value field (see column 25, lines 58 – 67 and column 26, lines 1 – 3).

Regarding claim 5, Hoover teaches the fields of the table are operable to be searched (see FIG.28 scenario step 1 and column 25, lines 44 – 57).

Regarding claim 6, Hoover teaches the first value is not equal to the second value (see FIG.8 module 130d, on keyword values, first value is 91011 and second value is 91015).

Regarding claim 7, Hoover teaches a cardinality between the keyword field and the keyword value field is a one-to-many relationship (see column 19, lines 27 – 35).

Regarding claim 8, Hoover teaches a method of expanding a table definition without modifying the table definition having executable instructions, comprising the steps of:

receiving a table definition having an identification field, a keyword field, and a keyword value field (see FIG.7, column 24, lines 9 – 16 and lines 60 – 67); and

associating a first value and a second value of the keyword value field with a first keyword of the keyword field (see FIG.7; first value is "OAT1", second value is "OAT2", keyword value field is TABLE_NAME" and association is by "OBJID(0011)" and column 24, lines 16 – 19).

However, Hoover does not explicitly disclose the claimed receiving a table having an identification field, a keyword field, and a keyword value field and associating a first value and a second value of the keyword value field with a first keyword: Hoover discloses a table definition as shown in fig. 7; Hoover discloses first value and second value associated by keyword of the keyword field as shown by "ODJID(0011)" in FIG.7.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Hoover wherein one table relates object identifiers to other object attribute tables. The motivation being that since attributes of an object can exist in one or more remote locations, mapping table by object identifier permits assembly or joining of data to construct a current complete set of object attributes associated with any given object. This permits search terms to object identifiers and also to rapid searching to find an object identifier associated with the predetermined search terms while at the same time retrieving desired information.

Regarding claim 9, Hoover teaches creating a first table entry in a table defined by the table definition for the first keyword and the first value (see FIG.7 and column 24, lines 25 – 39); and

creating a second table entry in the table defined by the table definition for the first keyword and the second value (see FIG.7, first keyword is TABLE_NAME" and second value is "0011").

Regarding claim 10, Hoover teaches creating a composite key using each field of the table definition wherein the key is operable to access a table associated with the table definition (see column 25, lines 58 – 67 and column 26, lines 1 – 3).

Regarding claim 11, Hoover teaches creating a first and second table from the table definition (see FIG.8 and column 25, lines 16 – 29);

inserting a first identification, the first keyword, and the first value into the first table (see column 29, lines 39 – 50);

inserting the first identification, the first keyword, and the first value into the second table (see column 29, lines 51 – 64); and

inserting the first identification, the first keyword, and the second value into the second table (see column 29, lines 61 – 64).

Regarding claim 12, Hoover teaches receiving a search comprising the first identification, the first keyword and the second value (see column 30, lines 46 – 47);

searching the first table to acquire a first location (see column 30, lines 47 – 51 and column 33, lines 15 – 17); and

searching the second table beginning at the first location within the second table until the second value is located (see column 30, lines 52 – 56).

Regarding claim 13, Hoover teaches returning a row of the second table wherein the second value is housed (see column 30, lines 57 – 60).

Regarding claim 14, Hoover teaches searching the first table improves access into the second table to retrieve the row (see column 25, lines 30 – 47).

Regarding claim 15, Hoover teaches creating a first and a second row of a table to house the first and the second values, respectively, each row housing the first identification and the first keyword (see FIG.8 module 130d).

Regarding claim 16, Hoover teaches a method of expanding a keyword by permitting one or more keyword values to be associated with each keyword having executable instructions, comprising the steps of:

receiving a table having an identification field, a keyword field, and a keyword value field (see FIG.7; "object identifier (ODJID)" is the "identification field", "table_name" is the "keyword field" and row is the "keyword value field"); and

receiving a first keyword associated with the keyword field and having a first value and a second value, each value associated with the keyword value field (see FIG.7"table_name" is the "first keyword", rows are the "keyword fields", "OAT1" is the "first value", "OAT2" is the "second value" and association of each value is by "0011" the keyword value field.

However, Hoover does not explicitly disclose the claimed receiving a table having a table definition comprising an identification field, a keyword field, and receiving a first keyword associated with the keyword field and having a first value and a second value, each value associated with the keyword value field: Hoover discloses table_name as first keyword, row as keyword field; OAT1 and OAT2 as first value and second value respectively as shown in fig. 7. The association of each value is by "0011" which is also as shown in fig. 7.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Hoover wherein one table relates object identifiers to other object attribute tables. The motivation being that since attributes of an object can exist in one or more remote locations, mapping table by object identifier permits assembly or joining of data to construct a current complete set of object attributes associated with any given object. This permits search terms to object

identifiers and also to rapid searching to find an object identifier associated with the predetermined search terms while at the same time retrieving desired information.

Regarding claim 17, Hoover teaches creating a key to access the table wherein the key is comprised of the identification field, the keyword field, and the keyword value field (see FIG.28 scenario steps 1 – 5 and column 53, lines 8 – 22).

Regarding claim 18, Hoover teaches searching a second table with the key to acquire a location within the table to being a search (see FIG.28 scenario steps 1 – 5 and column 53, lines 38 – 43).

Regarding claim 19, Hoover teaches a performance of the search of the table is improved using the location and the key (see FIG.28 scenario steps 4 and 5 and column 25, lines 44 - 47).

Regarding claim 20, Hoover teaches returning a row associated with the table when the key is found within the table (see FIG.28 scenario steps 3 and column 53, lines 19 - 22).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 703-305-8039. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 703-305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-303-3900.

FE
May 8, 2003

Primary SHAHID AL ALAM
PATENT EXAMINER